

In re Patent Application of  
**HARDWELL**  
Serial No. 10/081,886  
Filed: FEBRUARY 22, 2002

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Claims Listing:

This listing of claims replaces all prior versions and listings of claims in the application.

1. (Amended) A method for storing biometric information on a token comprising at least a magnetic storage medium, the method comprising:

capturing a biometric image and generating biometric data therefrom including generating pixel data for an array of image pixels comprising a series of consecutive and colinear image pixels;

obtaining a personal identification number (PIN);  
and

storing the biometric data and the PIN on the magnetic storage medium of the token.

2. (original) The method according to Claim 1, wherein the biometric information is based upon a fingerprint; and wherein capturing the biometric image comprises capturing the biometric image using a fingerprint sensor.

3. (original) The method according to Claim 1, wherein obtaining the PIN comprises requesting an authorized token user to provide the PIN.

4. (original) The method according to Claim 1, wherein the token comprises a card corresponding to the ANSI/ISO/IEC 7810 standard and the magnetic storage medium

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comprises a magnetic stripe having three tracks in accordance with the ANSI/ISO/IEC 7810 standard; and wherein storing the biometric data and PIN comprises storing the biometric data and PIN on the third track of the magnetic stripe.

5. (canceled).

6. (original) The method according to Claim 1, wherein the token comprises a generally rectangular substrate.

7. (original) The method according to Claim 1, wherein the token comprises at least one of an access card, credit card, debit card, identification card and smart card.

8. (original) A method of regulating the use of a token, the token comprising at least one of an access card, credit card, debit card, identification card and smart card, and including at least a magnetic storage medium thereon, the method comprising:

enrolling an authorized token user by  
capturing a first biometric image and  
generating therefrom first digital pixel data  
for a first array of image pixels,  
processing the first digital pixel data to  
produce enrollment biometric data,  
obtaining a first personal identification  
number (PIN) from the authorized user, and

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storing the enrollment biometric data and first PIN on the magnetic storage medium of the token; and verifying an identity of a token holder presenting the token by

capturing a second biometric image and generating therefrom second digital pixel data for a second array of image pixels,

capturing a second personal identification number from the token holder,

processing the second digital pixel data and the second PIN to produce verification biometric data, and

comparing the verification biometric data and second PIN with the enrollment biometric data and first PIN stored on the magnetic storage medium of the token to determine if the token holder is the authorized token user.

9. (original) The method according to Claim 8, wherein the biometric information is based upon a fingerprint; and wherein capturing the biometric images comprises capturing the biometric images using a fingerprint sensor.

10. (original) The method according to Claim 8, wherein obtaining the PIN comprises requesting an authorized token user to provide the PIN.

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11. (original) The method according to Claim 10,  
wherein verifying the PIN comprises:  
    reading the PIN from the magnetic storage medium;  
    requesting a verification PIN from the token holder;  
and  
    comparing the PIN read from the magnetic storage  
medium with the verification PIN.

12. (original) The method according to Claim 8,  
wherein the token comprises a card corresponding to the  
ANSI/ISO/IEC 7810 standard and the magnetic storage medium  
comprises a magnetic stripe having three tracks in accordance  
with the ANSI/ISO/IEC 7810 standard; and wherein storing the  
enrollment biometric data and PIN comprises storing the  
enrollment biometric data and PIN on the third track of the  
magnetic stripe.

13. (original) The method according to Claim 8,  
wherein the array of image pixels comprises a series of  
consecutive and colinear image pixels.

14. (original) A system for regulating the use of a  
token, the token comprising at least one of an access card,  
credit card, debit card, identification card and smart card,  
and including at least a magnetic storage medium thereon, the  
system comprising:

    an authorized token user enrollment unit including  
        a first biometric sensor device for

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capturing a first biometric image and generating  
therefrom first digital pixel data for a first  
array of image pixels,

a first image processor for processing  
the first digital pixel data to produce  
enrollment biometric data,

a personal identification number (PIN) unit for  
obtaining a PIN from the authorized user, and

a first magnetic storage medium  
reader/writer for writing the enrollment  
biometric data and the PIN on the  
magnetic storage medium of the token;

at least one token holder verification unit for  
verifying the identity of a token holder presenting the token,  
and comprising

a second biometric sensor device for  
capturing a second biometric image and  
generating therefrom second digital pixel data for a  
second array of image pixels,

a second image processor for processing  
the second digital pixel data to produce  
verification biometric data,

a second magnetic storage medium  
reader for reading the enrollment  
biometric data and the PIN from  
the magnetic storage medium of the token,

a PIN verification unit for  
verifying the PIN, and

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a comparator for comparing the verification biometric data produced by the second image processor with the enrollment biometric data stored on the magnetic storage medium of the token to determine if the token holder is the authorized token user.

15. (original) The system according to Claim 14, wherein the biometric information is based upon a fingerprint; and wherein each of the biometric sensor devices comprises a fingerprint sensor.

16. (original) The system according to Claim 15, wherein the biometric sensor device further comprises a finger slide adjacent the fingerprint sensor.

17. (original) The system according to Claim 16, wherein the finger slide further comprises finger guides and a finger stop.

18. (original) The system according to Claim 16, wherein the PIN unit comprises an input device for entry of the PIN by the authorized user.

19. (original) The system according to Claim 20, wherein the PIN verification unit comprises a second input device for entry of the verification PIN by the token holder.

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20. (original) The system according to Claim 14, wherein the token comprises a card corresponding to the ANSI/ISO/IEC 7810 standard and the magnetic storage medium comprises a magnetic stripe having three tracks in accordance with the ANSI/ISO/IEC 7810 standard; and wherein the first magnetic storage medium reader/writer writes the enrollment biometric data and PIN on the third track of the magnetic stripe.

21. (original) The system according to Claim 14, wherein the array of image pixels comprises a series of consecutive and colinear image pixels.